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EBNet Newsletter - April 2023

New

Pre-announcement - Engineering Biology Missions Hubs and Mission Awards

Expression of interest: 5 May 2023

Apply for 60-month Mission Hubs or 24-month Mission Awards in Engineering Biology. This call is looking to apply engineering principles to the design and fabrication of biological components and systems - including modifications of natural systems for bioremediation, waste management etc...

Pre-announcement - the final EBNet Proof of Concept Call

After three previous open Calls we will soon be advertising our last EBNet PoC funding. This open "mop-up" Call will fund a single £50K or several £25K bids. (No £100K cross-disciplinary projects will be sought.) Can you come up with something new and exciting? Details coming soon.

Nature Water: A Journal for All Water-related Research

Blended event: Cranfield University & Teams, 11-12.00,19 April 2023

Brought to you by the EBNet Working Group on $\underline{\text{Environmental Sensors and Wastewater}}$

<u>Surveillance</u> this features <u>Dr Fabio Pulizzi</u>, Chief Editor of Nature Water.

Nature Water includes a wide range of topics that include aspects of natural sciences (primarily earth and environmental science) engineering (including environmental, civil, chemical and materials) and social sciences (economy, human geography and sociology among others). Fabio will discuss his vision of the journal and discuss the topics it covers and what is looked for in submitted manuscript. Register here.



Now Open

EBNet funding opportunities for academia and industry are highlighted below.

5th EBNet Business Interaction Voucher Call

Deadline: 16 April 2023

Members can access up to £20K to support a business/academic interaction. Find the Guidance and Application form here. Informal questions welcome - <u>ask us</u>.

30 August-1 September 2023, Edinburgh

Registration is now open for this popular, free 2-day conference. Each year we gather as many of our ECR members together as we can to mingle, network, and share their research and ideas. This year we have a top International Speaker too! Share the Flyer around to all your new colleagues. We welcome new PhDs to New Lecturers and Young Professionals. See the Flyer for details and register for a place HERE.

EBNet Placement Call - Always open

These are worth up to £1,500 for UK-based placements and £3,000 for overseas placements.

ECR Conference Travel Bursary - Always open

Looking to present your work at a major conference and lack funding? Given the increased cost of international flights we have raised our support to £2,000 (max.) for our listed conferences in 2023 - BAGECO, ISMOS 9, FEMS23, Aquaconsoil and the IWA Microbial Ecology and Water Engineering Conference. Send in your application as soon as you are notified - we have a number set aside for each conference!

EBNet: Share With A Peer (SWAP) Travel Bursary

Always open. Available to Early Career Researchers

Proud of the work going on in your lab? Fancy a visit to another lab tackling similar topics? We have just the thing for you, We can offer **up to £250*** towards accommodation, meals, and travel per person just make a short video clip &/or pictures suitable for our website. Flyer.

Testing the Water 6

26/27 June 2023, Oxford

Are you an ECR aiming to go to TTW6, Oxford? EBNet can help with ECR Travel Bursaries worth £200 towards Travel and Accommodation - no strings attached - just ask.

Spotlight On...

Do you have any good news to share with other members? Email us details if you want a shoutout in the next newsletter.



WASE Ltd are offering an opportunity for a 3 month internship for an Early Career Researcher with experience in developing Technical Economic Evaluation (TEE).

WASE AD+ is an innovative technology that converts waste into energy through Electro-Methanogenesis (EM). They conduct lab experiments, scaleup concept design and TEE specifically on: 1. Pre-treatment of AD waste through EM, 2. Treatment through EM only, 3. Post-treatment of AD waste through EM. This is an opportunity to work on a cutting-edge technology and develop skills in technical and economic analysis. You will work closely with experienced researchers and industry professionals to produce a comprehensive report on the economic feasibility of WASE AD+. Apply now - with immediate April/May start preferable. Send all enquiries to llyr.anwyl@wase.co.uk.

New from the Circular Economy Innovation Network

Transforming Industrial Waste Gases to Chemicals Action Plan. Check this out to find more on their vision for using CO/CO2 in the manufacture of higher-value chemicals to support a circular carbon future. This group aims to create a chemical sector and associated supply chains that can thrive in a circular, net zero world and promote the existing and emerging technologies to benefit the chemicals supply chain in the UK.

XPRIZE Global Call for Future-Positive Ideas

Got a good idea? Tell XPRIZE your idea for a potential prize competition <u>here</u>.

Are you getting the latest information from us?

More people are turning to EBNet for speedy access to events, reports, jobs, PhD/Postdoc positions etc. Join us on <u>LinkedIn</u> and <u>Twitter</u>.



Forthcoming Events

Find selected upcoming events below.
For more, go to: <u>Events Roundup</u>

The Microbiology Society Annual Conference 2023 - 17-20 April 2023, Birmingham International Convention Centre

KTN: Circular Critical Materials Supply Chains Networking Event - 19 April 2023, Birmingham

Innovate UK: Net Zero Hydrogen Fund Briefing Event - 19 April 2023

BBSRC: strategic Longer and Larger (sLoLa) grants: webinar one and webinar two - 20 April and 26 April 2023

Cranfield Water Masterclasses:

The PFAS 'Forever Chemicals' in Drinking Water - Regulation, Fate and Treatment - 3 May 2023

Advanced Sensors Technology - 5 May 2023

Plastic in Drinking Water - how worried should we be? - 10 May 2023

Alternative Energy Vectors for the Water Sector: Opportunities and Challenges on the Path to Net Zero - 12 May 2023

UK Phage Innovation Showcase - 16 May 2023, University of Leicester

NBIC Showcase: Supporting Collaboration for Impact in Biofilm Research - 17 May 2023. Nottingham

Letters in Applied Microbiology ECS Research Symposium 2023 - 17 May 2023, Queen's University Belfast

2nd International Conference on Sustainable Chemical and Environmental

Engineering (SUSTENG 2023) - 14-18 June 2023, Cyprus

KTN: Hydrogen Supply Chain Showcase - 22 June 2023

BAGECO 2023 - 26-30 June 2023, Copenhagen (Abstract deadline:15 April)

Contamination & Geotech Expo - 13/14 September 2023, NEC Birmingham

RemTech Expo - 20-22 September 2023, Ferrara Fiere, Italy

IWA: 1st Non-Sewered Sanitation Conference - 15-18 October 2023, Johannesburg, South Africa

5th IWA Resource Recovery Conference - 1-4 November 2023, Shenzhen, China

E3B Metals in Biology: Bio-recovery of technology-relevant metals - 12-14 December

2023, Manchester

Funding

Funding opportunities for academia and industry are highlighted below.

For more, go to: Funding Roundup



RSC: Emerging Technologies Competition - 17 April 2023

AMI: New Lecturer Research Grant - 30 April 2023

UKRI: Sustainable bio-based materials and manufacture: CR&D - 3 May 2023

<u>UKRI Engineering Biology Missions Hubs and Mission Awards</u> - Intention to submit: 5 May

2023. Deadline: July 2023

Innovate UK: Knowledge Transfer Partnerships - 17 May 2023

EPSRC: International centre to centre research collaborations - 18 May 2023

IBioIC: Innovation Seed Funding - 22 May 2023

<u>UKRI: Land use for net zero – Hub (LUNZ-Hub)</u> - Expression of interest: 24 May 2023.

Deadline: 25 July 2023

BBSRC: Discovery Fellowships - 25 May 2023

Processes 2023: Young Investigator Award - 31 July 2023

EPSRC responsive mode new investigator awards - 28 September 2023

EPSRC responsive mode network grant - 28 September 2023

EPSRC responsive mode postdoctoral fellowship - 28 September 2023

EPSRC responsive mode open fellowship - 28 September 2023

EPSRC responsive mode overseas travel grant - 28 September 2023

EPSRC responsive mode standard research grant - 28 September 2023

AMI: Small Research Projects and Equipment Fund - 31 October 2023

Pre-announcement: Engineering Biology Missions Hubs and Mission Awards - tbc

Pre-announcement: strategic Longer and Larger (sLoLa) grants: frontier bioscience

2023 to 2024 - tbc



Jobs, Training, Awards & PhDs

Did you know we have funds available to help members access placements in industry or academia?

Jobs (also see FindAPostDoc & Jobs.ac.uk)

BBSRC: Manager - Evidence & Evaluation - 16 April 2023, Swindon

Senior Research Associate in Marine Microplastics and the Carbon Cycle - 24 April 2023, University of East Anglia

Postdoctoral Research Fellow - 30 April 2023, University of Exeter - Faculty of Environment, Science and Economy

Training

UKCEH Training: various, including...

Spatial analysis in QGIS and R - An introduction for environmental scientists -

Spring/Summer 2023

Transforming environmental data in R - 15-18 May 2023

Freshwater phytoplankton identification - 10-14 July 2023

Climate data analysis with python - immediate access

IBioIC: Certificate of Upstream Bioprocessing (3-Day) - 20-22 June 2023, Heriot-Watt

University

<u>The Singapore Centre for Environmental Life Sciences Engineering (SCELSE):</u>
<u>Summer Course</u> - 3-21 July 2023, Singapore

Awards and Competitions

Microbiology in Society Award - 21 April 2023

EMA: Engineering & Manufacturing Awards - various - enter by: 28 April 2023

PhDs (see FindaPhD)

Intermediate dark fermentation as a platform technology for chemical recycling and biorefineries in the water sector - 24 May 2023, Cranfield University

Biological coagulant recovery for resilient and sustainable water and wastewater

treatment - 24 May 2023, Cranfield University

Quantifying antibiotic resistance and antibiotic resistance selective chemicals in the River Almond Catchment Area – a baseline for risk assessment and intervention

targets - 29 May 2023, Edinburgh Napier University

<u>Hydrodynamic Methods for Cell Disruption</u> - 31 August 2023, University of Southampton

Publications

For a series of interesting papers try <u>Interface Focus.Theme issue 'Microbial ecology for engineering biology (Part I)'</u> (organised by Prof. Thomas Curtis and A. Prof. Jane Fowler) from the Royal Society

<u>Cultivating a more effective culture to advance the engineering of microbial communities</u>

By: Fowler SJ, Curtis TP. In: 2023. Interface Focus13: 20220073

Experimental Evaluation of Continuous In-Situ Biomethanation of CO2 in Anaerobic Digesters Fed on Sewage Sludge and Food Waste and the Influence of Hydrogen Gas-Liquid Mass Transfer

By: Poggio, D et al. In: Processes, 11(2), p.604.

Recent advances in biochar amendments for immobilization of heavy metals in an agricultural ecosystem: A systematic review

By: Saloni Sachdeva et al. In: Environmental Pollution. Volume 319, 15 February 2023, 120937

Effective hydrolysis for waste plant biomass impacts sustainable fuel and reduced air pollution generation: A comprehensive review

By: Rajesh K. Srivastava et al. In: Science of The Total Environment. Volume 859, Part 2, 10 February 2023, 160260

Still here?

In other news - CHATGPT

It would be remiss to fail to mention the paradigm changing effects of the hottest topic in computing - CHATGPT. This AI is now openly available for free demonstration online.

Undoubtedly, this tool will change how we all function in unpredictable ways. (Want to write

a review paper on *any* topic (with references) in a few seconds anyone? It's fun, free and near indistinguishable from the real thing!). In this information free-for-all, the value of independent verification from trusted, credentialed sources will only increase:) But a shake-up in how all information is assessed is inevitable. Will it affect you?

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